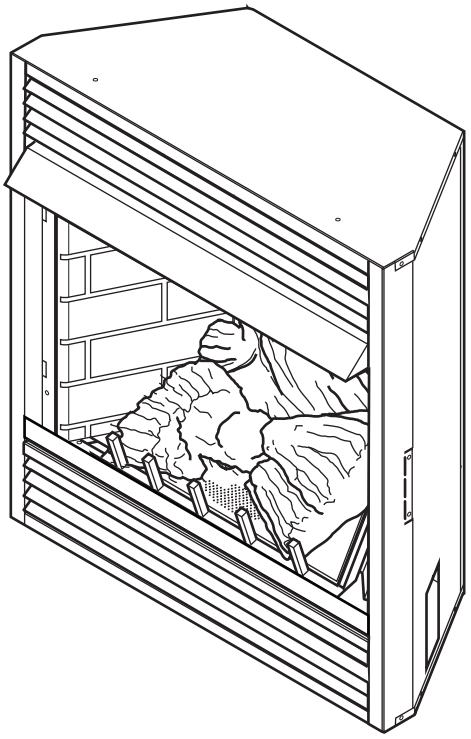
MHSC
Monessen Hearth Systems Company

DFX, DBX Vent-Free Fireplace Systems

Installation & Operating Instructions

Models:

DFX24C, DFX32C, DBX24C



WARNINGS

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

MADE IN U.S.A.

DESIGN CERTIFIED

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8*.

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

33D4047 2/10 Rev. 4

Thank you and congratulations on your purchase of a MHSC Fireplace.

PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE!

IMPORTANT: Read all instructions and warnings carefully before starting installation.

Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

DFX24C and DFX32C gas log appliances described in this manual feature the TRIPLE PLAY BURNER SYSTEM® technology producing a full random yellow flame, full depth ember bed and glowing logs.

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INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

WARNING

- **Any change to this heater or its controls can be dangerous.**
- **Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.**
- **Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.**
- **Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.**

1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
3. Young children should be carefully supervised when they are in the same room with the appliance.
4. Do not place clothing or other flammable material on or near the appliance.
5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
6. Installation and repair should be done by a qualified service person.
7. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
8. **CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
9. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.I/NFPA54.**
10. This unit complies with ANSI Z21.11.2 Unvented Heaters.
11. Do not install the heaters in a bathroom or bedroom.
12. Correct installation of the ceramic fiber logs, proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. Refer to log placement instructions for proper installation.
13. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
14. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/or aromatics (scents) may be reburnt in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
15. This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8.*
16. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
17. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
18. Unvented gas heaters emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
19. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

    The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

20. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
21. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
22. The appliance must be isolated from gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).
23. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
24. Never burn solid fuels in a fireplace where a unvented room heater is installed.
25. Always have a fireplace screen in place when the appliance is in operation and, unless other provisions for combustion air are provided, the screen must have an opening(s) for induction of combustion air.

THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET, PERMANENTLY LOCATED, MANUFACTURED (MOBILE) HOME, WHERE NOT PROHIBITED BY LOCAL CODES.
THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES.

CODES

Adhere to all local codes or, in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

or

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

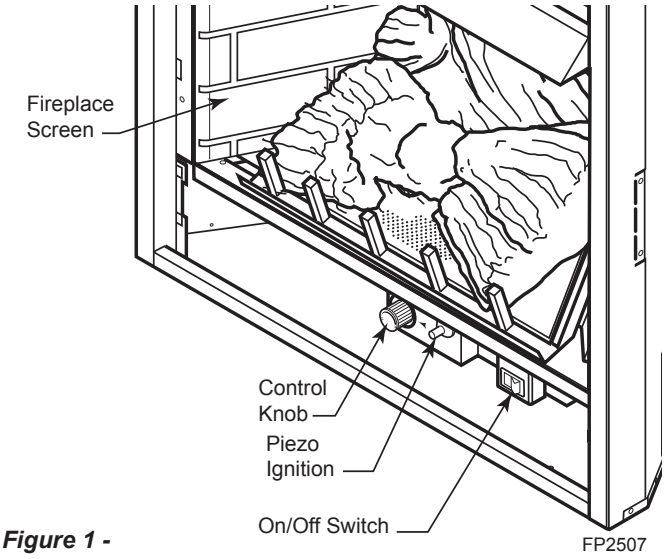


Figure 1 - Unvented Gas Heater (Control Access Door Shown Open)

This vent-free fireplace must be mounted on the floor or on the optional fireplace hearth.

OPERATION

This unvented gas heater requires no outside venting and burns cleanly with high heating efficiency.

This zero-clearance unvented gas heater can be installed against (or recessed into) any wall that is accessible to a gas line.

GAS PRESSURES

Control	Fuel	Manual & T-stat	Millivolt
Regulator Pressure	Nat.	4.0” w.c.	3.5” w.c.
Pilot Regulator	Nat.	n/a	3.5” w.c.
Max. Inlet Pressure	Nat.	10.5” w.c.	10.5” w.c.
Min. Inlet Pressure	Nat.	5.0” w.c.	5” w.c.
Regulator Pressure	LP	10.0” w.c.	10.0” w.c.
Max. Inlet Pressure	LP	13.0” w.c.	13.0” w.c.
Min. Inlet Pressure	LP	11.0” w.c.	11.0” w.c.

GAS SPECIFICATIONS

Model	Fuel	Control	Input BTU/hr Max.	Input BTU/hr Min.
24DFXNMC	Nat.	Manual	22,000	15,000
24DFXPMC	LP	Manual	22,000	17,000
24DFXNVC	Nat.	Millivolt	22,000	17,000
24DFXPVC	LP	Millivolt	22,000	17,000
32DFXNVC	Nat.	Millivolt	26,000	20,000
32DFXPVC	LP	Millivolt	26,000	20,000
DBX24NTC	Nat.	T-Stat	10,000	--
DBX24PTC	LP	T-Stat	10,000	--

NOTE: For LP models an external regulator is required to reduce supply pressure to a maximum of 13" w.c.

IGNITION CONTROLS

Piezo ignitor allows ignition of the pilot without the use of matches or batteries.

Manual control has four (4) positions:

- **OFF** - All gas to the gas logs is shut off at the valve.
- **IGN** - Valve position to light/maintain a standing pilot.
- **ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- **LOW/HI** - Variable position to control flame height (heat output). Both front and rear burners are in operation to provide realistic glow and yellow flame.

Thermostat control has three (3) positions:

- **OFF** - All gas to the gas logs is shut off at the valve.
- **IGN** - Valve position to light/maintain a standing pilot.
- **LOW/HI** - Variable position corresponding to desired temperature.

PILOT

The gas log heater is fitted with a specially designed safety pilot light which senses the amount of oxygen available in the room and shuts the gas log heater off if the oxygen level begins to drop below a satisfactory level. The pilot can only be relit when adequate fresh air is available.

THERMAL GENERATOR

The millivolt gas log pilot is fitted with a millivolt generator to provide power for remote activation.

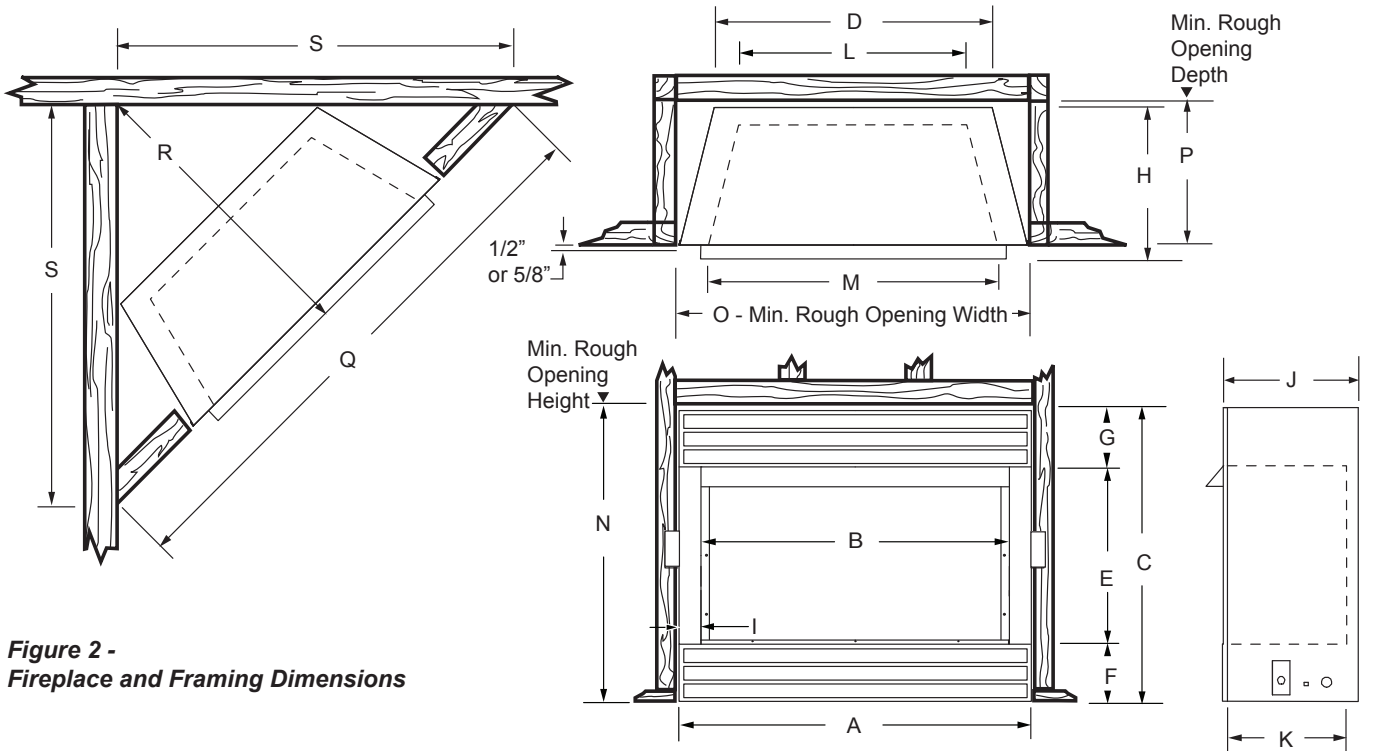


Figure 2 -
Fireplace and Framing Dimensions

Ref.	DFX24C/DBX24C		DFX32C	
A	24½"	(622 mm)	32"	(813 mm)
B	22½"	(572 mm)	28¾"	(730 mm)
C	26½"	(673 mm)	30"	(762 mm)
D	14"	(356 mm)	21¾"	(553 mm)
E	17"	(432 mm)	20¼"	(514 mm)
F	4⅝"	(118 mm)	4¾"	(121 mm)
G	4⅞"	(124 mm)	5"	(127 mm)
H	11⅞"	(302 mm)	13⅜"	(340 mm)
I	1"	(25 mm)	1⅝"	(41 mm)
J	10½"	(267 mm)	12"	(305 mm)
K	9"	(229 mm)	10⅝"	(270 mm)
L	13⅛"	(333 mm)	17½"	(445 mm)
M	21"	(533 mm)	27"	(686 mm)
Framing Dimensions				
N	26¾"	(680 mm)	30¼"	(768 mm)
O	24¾"	(629 mm)	32½"	(826 mm)
P	10½"	(267 mm)	12¼"	(311 mm)
Q	42½"	(1080 mm)	53¾"	(1326 mm)
R	21"	(533 mm)	26¾"	(680 mm)
S	30"	(762 mm)	38"	(965 mm)

WARNING

- **Handle the gas log burner assembly by the grate only. Do not pick the unit up by the burners.**
- **Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.**

GETTING STARTED

Make sure you have received all parts:

Check your packing list to verify that all listed parts have been received. You should have the following:

- Unvented gas heater
- Trim kit
- Two (2) 90°-angle brackets
- Ceramic fiber logs
- Installation/operating instructions
- Canopy and three (3) screws
- Two (2) anchoring screws
- Four (4) black screws

Millivolt controlled heater designed to be operated with optional devices for ON/OFF functions.

- Hand held Remote with receiver
- Wall T-stat with 20' wire
- Wall switch with 20' wire
- Hand held Thermostat Remote w/receiver

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.**

What you will need for installation:

You must have the following items available before proceeding with installation:

- External regulator (for propane/LPG only)
- Manual shutoff valve
- Piping which complies with local codes
- Sediment trap
- Phillips head screwdriver
- Tee joint.
- Pipe sealant approved for use with propane/LPG
- Pipe wrench
  (Resistant to sulfur compounds)

WARNING

Do not install the heater:

- **Where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater.**
- **In high traffic areas.**
- **In windy or drafty areas.**

In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the *Location of Fireplace* and *Clearances* and *Height Requirements*, and *Firebox Framing* sections found in this manual.

   NOTE: Be sure all packing material has been removed from underside the unit.
2. Install canopy and logs per instructions found in this manual. The canopy MUST be installed for safe operation of the unit.
3. Field wire main power supply to units with fan kit. Refer to the *Electrical Section* found in this manual. (Electrical connections should only be performed by an experienced, licensed certified tradesman).
4. Install optional ON/OFF kit on units with millivolt control. Refer to the installation instructions included with the kit and also refer to the *Electrical Wiring* section found in this manual.
5. Plumb gas line. Refer to the *Connecting the Gas* section found in this
   manual. (Gas connections should only be performed by an experienced,
   licensed/certified tradesman).
6. Complete finish wall material and/or surround.

ADEQUATE COMBUSTION AND VENTILATION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

UNUSUALLY TIGHT CONSTRUCTION IS DEFINED AS CONSTRUCTION WHERE:

a) walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm
(6 x 10^{11} kg per pa/sec-m^2) or less with openings gasketed or sealed;

b) weather striping has been added on openable windows and doors, and

c) caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\text{BTU/hr} = \frac{(L_1 + L_2)\ \text{Ft} \times (W)\ \text{Ft} \times (H)\ \text{Ft}}{50} \times 1000$$

Consider two connecting rooms with an open area between, with the following dimensions:

L_1 = 15½ Ft., L_2 = 12 Ft., W = 12 Ft., H = 8 Ft.

$$\text{BTU/hr} = \frac{(15½ + 12) \times (12) \times (8)}{50} \times 1000 = 52800\ \text{BTU/hr}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.

$$\text{BTU/hr} = \frac{(15½) \times (12) \times (8)}{50} \times 1000 = 29{,}760\ \text{BTU/hr}$$

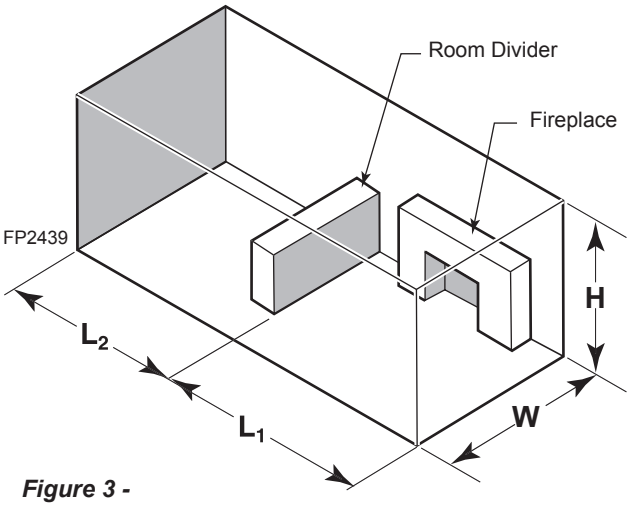


Figure 3 - Example of a Large Room with a Room Divider

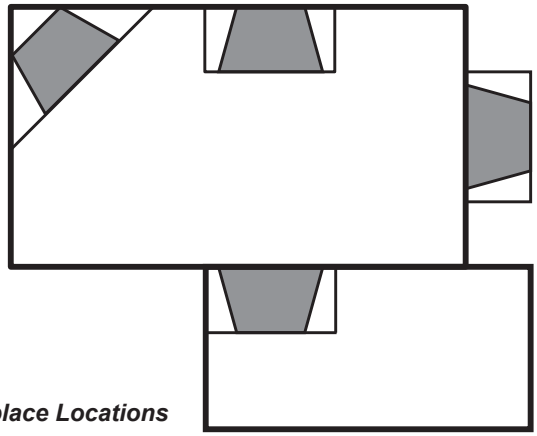
WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA54, Section 5.3 or applicable local codes.

FIREPLACE LOCATION

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to “Clearances” section on *Page 10*. Minimum clearances to combustibles **must be maintained.**
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- **DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.**
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. *Refer to Figure 4* below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.



FP2440

Figure 4 -
Possible Fireplace Locations

Ensure that minimum clearances shown in *Figures 5 and 6* are maintained. Left and right clearances are determined when facing the front of the firebox.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

Sidewall Clearances — The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 9" for the DBX24C/DFX24C and DFX32C. *Figure 5*

Ceiling Clearance — The ceiling must be at least 42" from the top of the firebox opening. *Figure 5*

Back Wall Clearance — The appliance may be placed against a combustible back wall.

Floor Clearance — The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support and so that no cold air can enter from under the firebox.

Mantel clearances — The canopy supplied with the unit must be installed. If a combustible mantel is installed. It must meet the clearance requirements detailed in *Figure 6.*

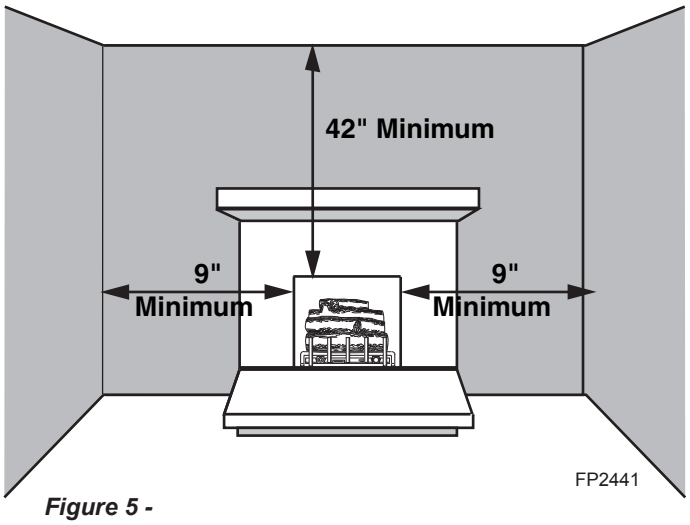


Figure 5 -
Sidewall and Ceiling Clearances

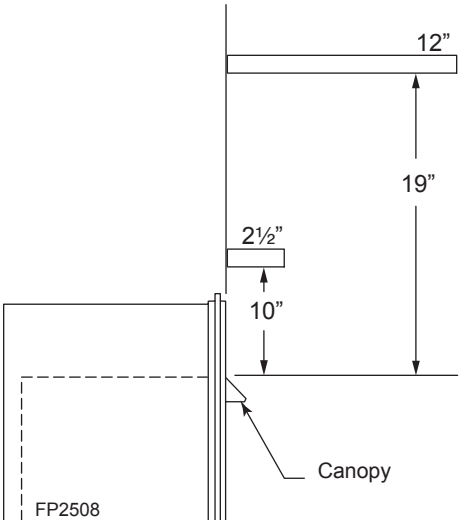


Figure 6 -
Mantel Clearances

WARNING

The dimensions shown in *Figures 5 and 6* are minimum clearances to maintain in installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

If unit is to be “built in”, fireplace framing can be built before or after the appliance is set in place. **BE SURE THAT ALL PACKING MATERIAL HAS BEEN REMOVED FROM THE UNDERSIDE OF THE UNIT PRIOR TO SETTING THE FIREBOX IN PLACE.** Construct fireplace framing following *Figure 2 on Page 6* for fireplace dimensions. The framing headers may rest directly on top of the firebox.

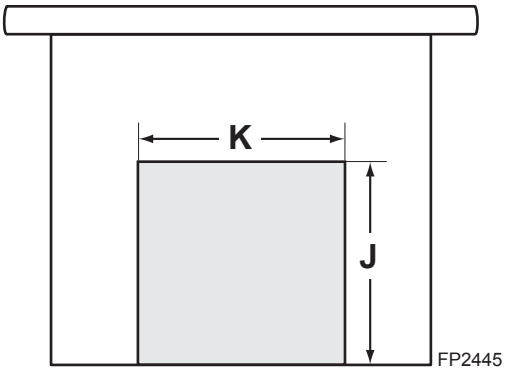
The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support and so that no cold air can enter from under the firebox.

Anchor fireplace to the side framing members using nailing flanges.

WARNING

The fireplace must be installed giving full consideration to the clearance and height requirements identified in this manual.

1. Bend out the nailing flanges located on each side of the firebox.
2. Slide the firebox into prepared framing or position firebox in its final position and frame later.
3. Level the firebox by checking the top edge of the firebox. Shim if necessary.
4. Anchor firebox to the side framing members using 8d nails or other suitable fasteners. *Figure 8*
5. The canopy must be installed for safe operation of the heater. *Refer to Page 17* for canopy installation details.



When finishing a custom cabinet, mantel or other built-in enclosure, the opening size to accommodate the fireplace with trim installed is as follows:

Ref.	DFX24C	DBX24C	DFX32C
J	26¾" (680 mm)	26¾" (680 mm)	31¼" (800 mm)
K	25" (635 mm)	25" (635 mm)	32 13/16" (833 mm)

Figure 7 - Custom Cabinet

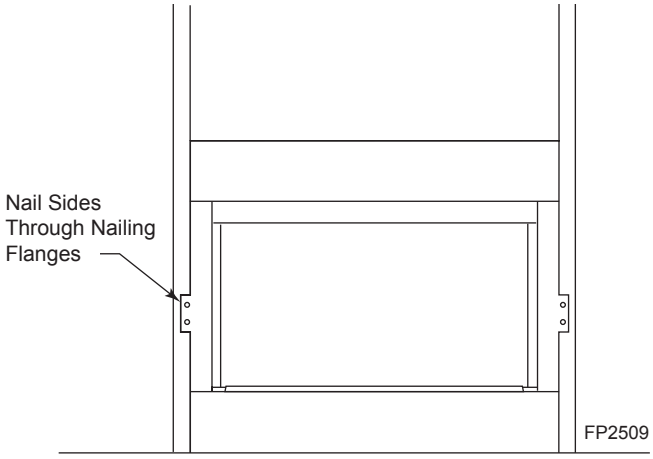


Figure 8 - Nailing Flanges

SECURING HEATER TO FLOOR OR HEARTH

NOTE: Clearance requirements as detailed in *"CLEARANCES and HEIGHT REQUIREMENTS"* section on *Page 16* of this manual, must be met before securing the heater in place.

To prevent movement, the heater must be secured to the floor or hearth.

1. Open the control access door and remove the screen.
2. Remove carton containing the four-log set.
3. To remove the grate and base assembly, take out two (2) screws as shown in *Figure 9*.
4. Lift grate and base assembly out of the firebox.
5. Secure the firebox with two anchoring screws (3/16" x 1¼" length) supplied with the fireplace system. *Figure 10*

NOTE: If the unit is mounted on carpeting, tile or combustible material without the hearth, a metal or wooden base covering the entire width and depth of the base must be installed.

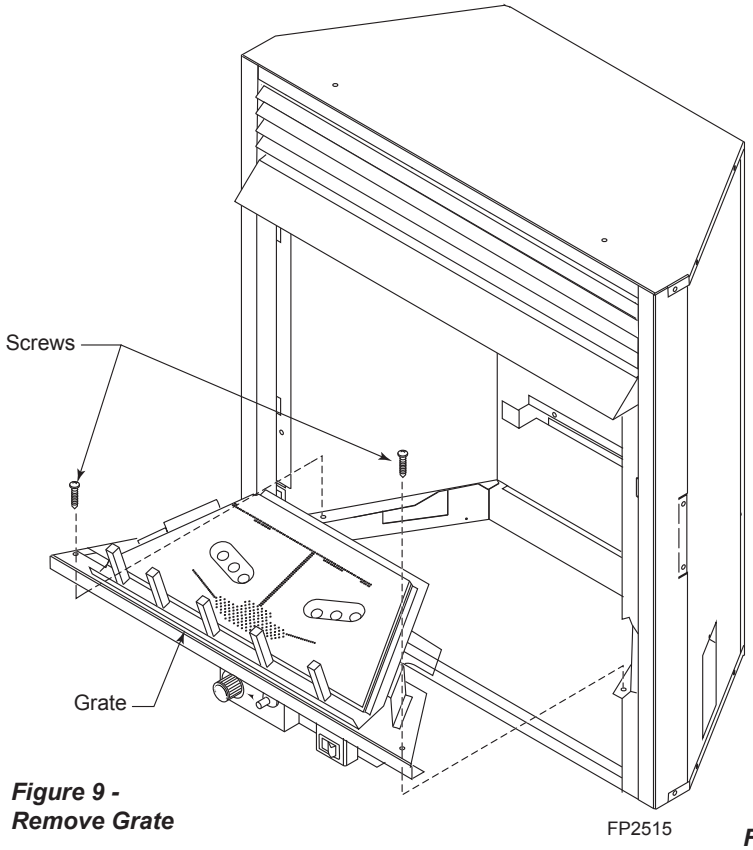


Figure 9 - Remove Grate

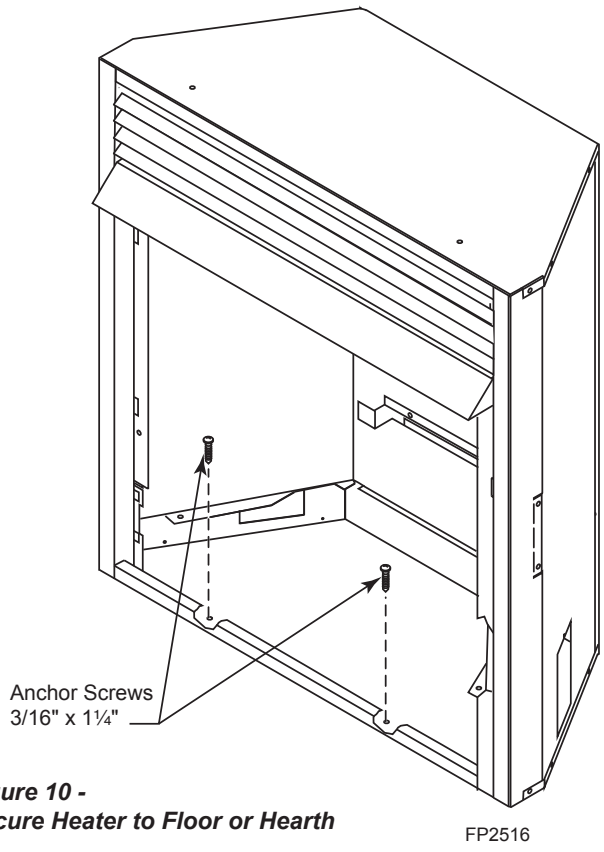


Figure 10 - Secure Heater to Floor or Hearth

NOTICE: A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

WARNING

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.
A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 10*
A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliable. *Figure 11*

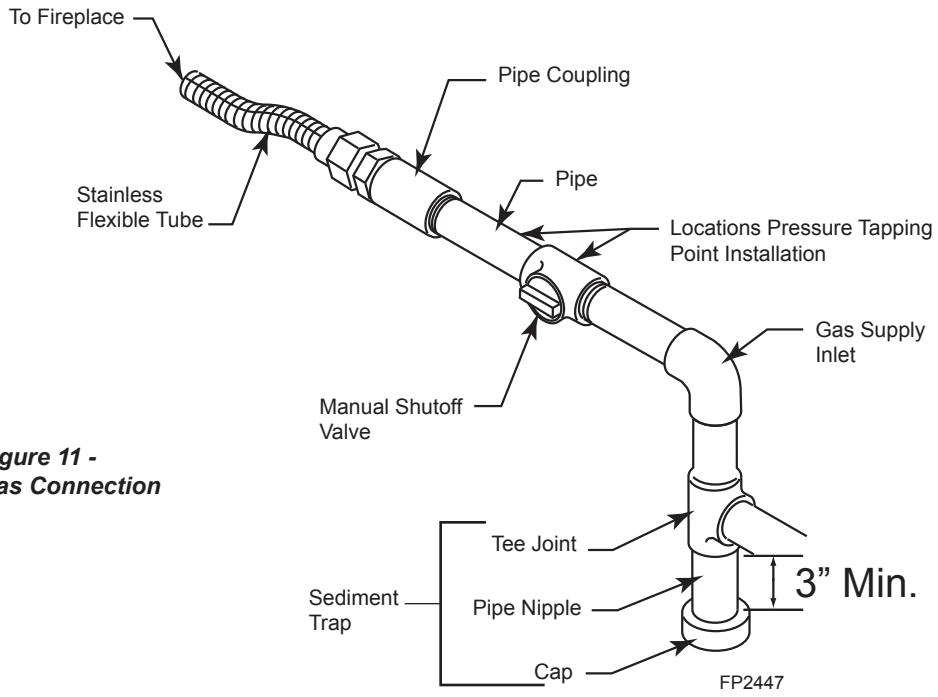


Figure 11 -
Gas Connection

IMPORTANT: Loosen the pipe adapter on the flex tube before installing to the system piping.

Always use an external regulator for all propane/LPG heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

WARNING

CHECK GAS TYPE: The gas supply must be the same as stated on the heater’s rating plate. If the gas supply is different, DO NOT INSTALL THE HEATER. Contact your dealer for the correct model.

When tightening the joint to the valve, hold the valve securely to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

Check the gas pressure with the appliance burning and the control set to **HIGH**.

Open control access door at bottom front of unit to find valve and regulator referred to below.

WARNING **Do not use open flame to check for gas leaks.**

WARNING **Connecting directly to an unregulated propane/LP tank can cause an explosion.**

MANUAL CONTROL

Figure 12

The pressure regulator is preset and locked to discourage tampering. If the pressure is not as specified, replace the regulator with the correct part from the parts list in this manual.

Remove 1/8" NPT plug, located on side of regulator body. Install fitting and tubing to pressure gauge. After taking pressure reading, reinstall test plug. Check for gas leaks.

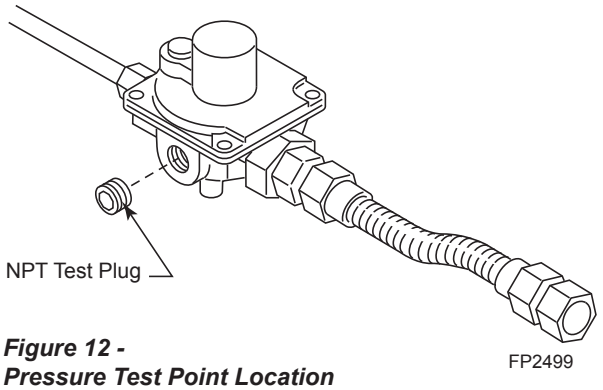


Figure 12 - Pressure Test Point Location - Manual Control

THERMOSTAT CONTROL

Figure 13

Turn captured screw counter clockwise two or three turns and then place tubing to pressure gauge over test point (Use test point closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks.

MILLIVOLT CONTROL

Figure 14

The valve regulator controls the burner pressure which should be checked at the pressure test point.

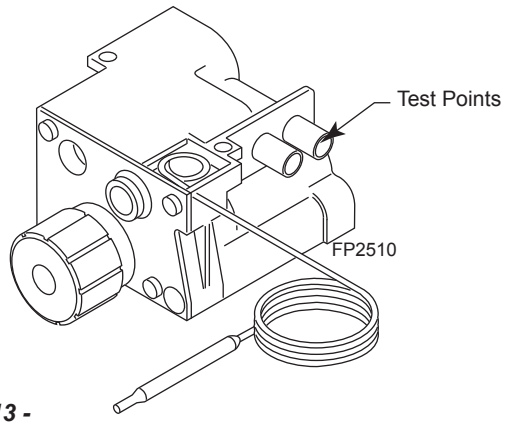


Figure 13 - Alternate Test Point Location for Thermostat control Units

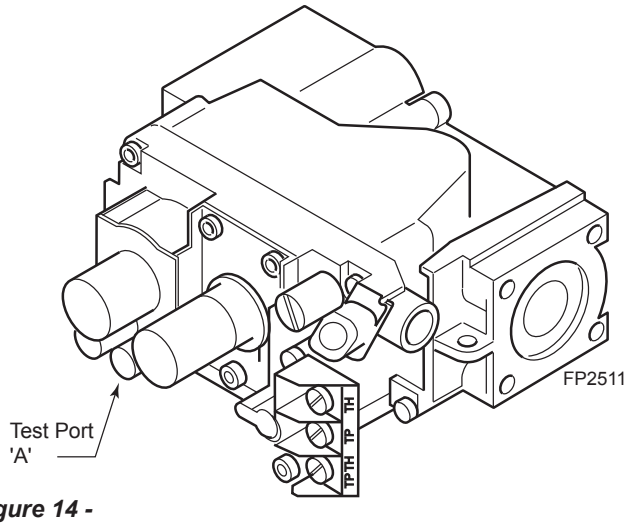


Figure 14 - Pressure Test Point Location - Millivolt Valve

Turn captured screw counter clockwise two or three turns and then place tubing to pressure gauge over test point. (Use test point “A” closest to gas inlet). After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks.

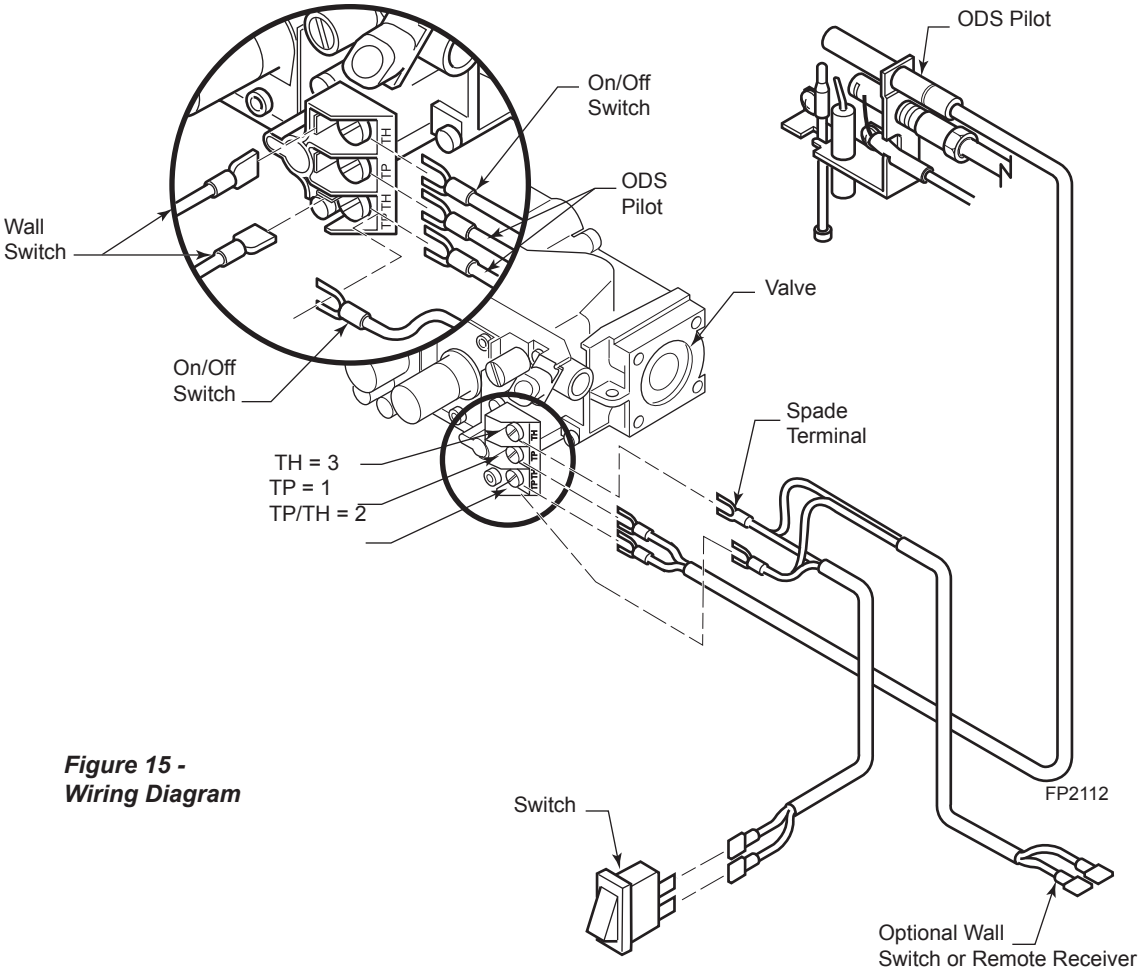


Figure 15 - Wiring Diagram

WARNING

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

CONNECTING OPTIONAL WALL SWITCH

1. Use 18 awg, two-wire cable, 15 feet maximum length.
2. At one end of the cable, connect both wires to the wall switch or thermostat. At the other end, connect one wire to TP/TH and one wire to TH. The color of the wires does not matter.

CONNECT REMOTE RECEIVER

THESE INSTRUCTIONS SUPERCEDE THE SECTION ENTITLED "HEARTH MOUNT" IN THE MILLIVOLT HAND-HELD REMOTE INSTRUCTIONS SUPPLIED WITH THE REMOTE.

Figure 16

1. Remove bottom louvre door.
2. Connect the remote connectors located in the unit.
3. Stick Velcro• pads with self-adhesive backing to bottom of remote receiver and to floor of compartment behind access panel.
4. Attach remote receiver to firebox with Velcro• pads. Control switch must face forward.

NOTE: Do not place remote in combustion chamber.

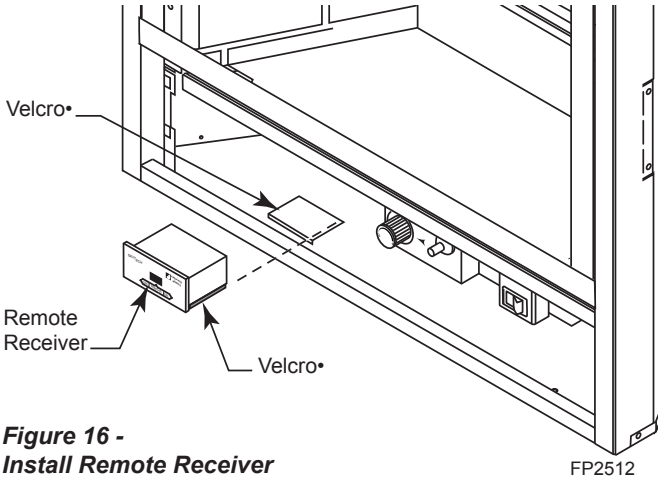


Figure 16 - Install Remote Receiver

CHECK SYSTEM OPERATION

The millivolt system and individual components may be checked with a millivolt meter having a 0-1000 mV range. Conduct each check shown in chart below by connection meter test leads to terminals as indicated.

A. COMPLETE MILLIVOLT SYSTEM CHECK

("A" Reading - Thermostat contacts CLOSED - Control Knob "ON" - Main burner should turn ON)

a. If the reading is more than 100 millivolts and the automatic valve still does not come on, replace the control.

b. If the closed circuit reading ("A" reading) is less than 100 millivolts, determine cause for low reading, proceed to Section B below.

B. Thermopile Output Reading Check

("B" Reading - Thermostat contacts OPEN - Main burner OFF)

1. Check gas pressure to the unit. If gas pressure is within minimum and maximum on data plate, then check pilot voltage, 325 millivolts minimum. If the minimum millivolt reading is not obtainable, replace pilot.

Check Test	To Test	Connect Meter Leads to Terminals	Switch or Thermostat Contacts	Meter Reading Should Be
A	Complete System	2 & 3	Closed	Closed
B	Thermopile	1 & 2	Open	Open

WARNING

Do not operate the unit without the screen frame panel and canopy installed.

REMOVE SCREEN

1. Remove bottom louver. *Figure 17*
2. Removing fireplace screen frame panel by pushing screen frame panel up and out. *Figure 17*

NOTE: Fireplace screen must be removed to access log box and to install canopy.

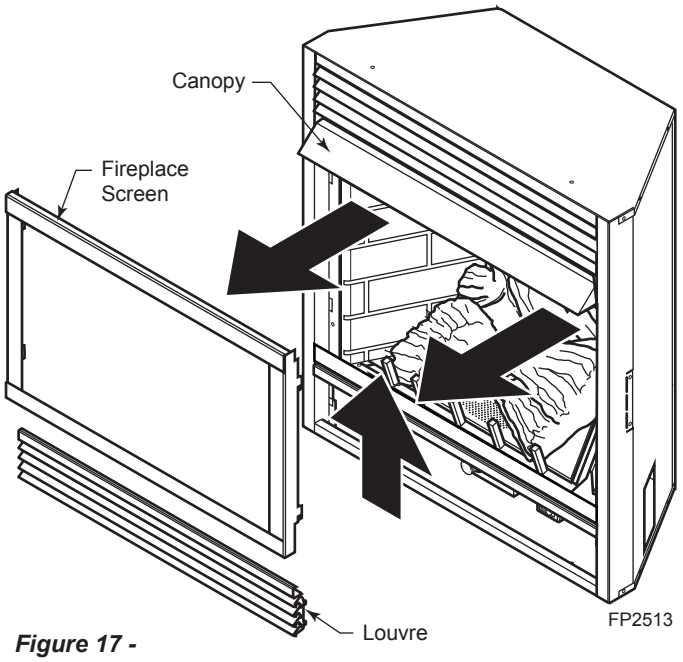


Figure 17 - Remove Fireplace Screen Panel

INSTALL CANOPY

1. Push louvers up and out to remove top louver assembly.
2. Align the black canopy with the holes in the top frame assembly. *Figure 18*
3. Install the three (3) screws (in owner's manual packaging) which attach the canopy to the top frame assembly. *Figure 18*
4. Tighten all screws. Make sure the canopy is level and secure. Install top louver assembly.

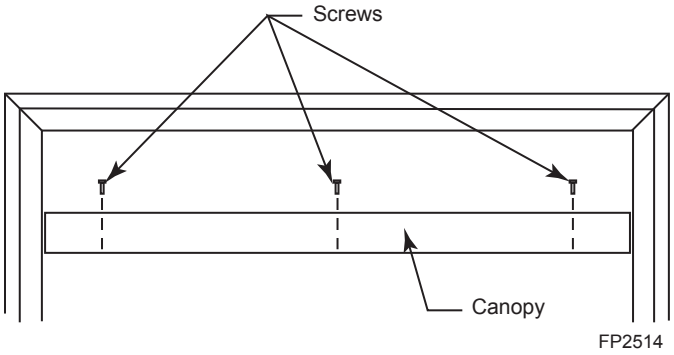


Figure 18 - Install Canopy

Before you begin — This unit is supplied with six (6) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs and TPB-RW (rock wool) supplied with the unit.

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

CAUTION

DO NOT sprinkle volcanic rock on the logs or around the pilot or the main burner. This may cause sooting. Only place volcanic rock on the floor of the fireplace.

During initial operation of the new heater, burning logs will give off a paper burning smell and orange flames will be present. Simply open the windows for a few hours to vent the odor.

DFX24C LOG PLACEMENT

Figure 19

1. Install the rear log (#3) on back of burner.
2. Install the right log (#1) on burner pins on right side of burner.
3. Install the left log (#2) on burner pins on left side of burner.

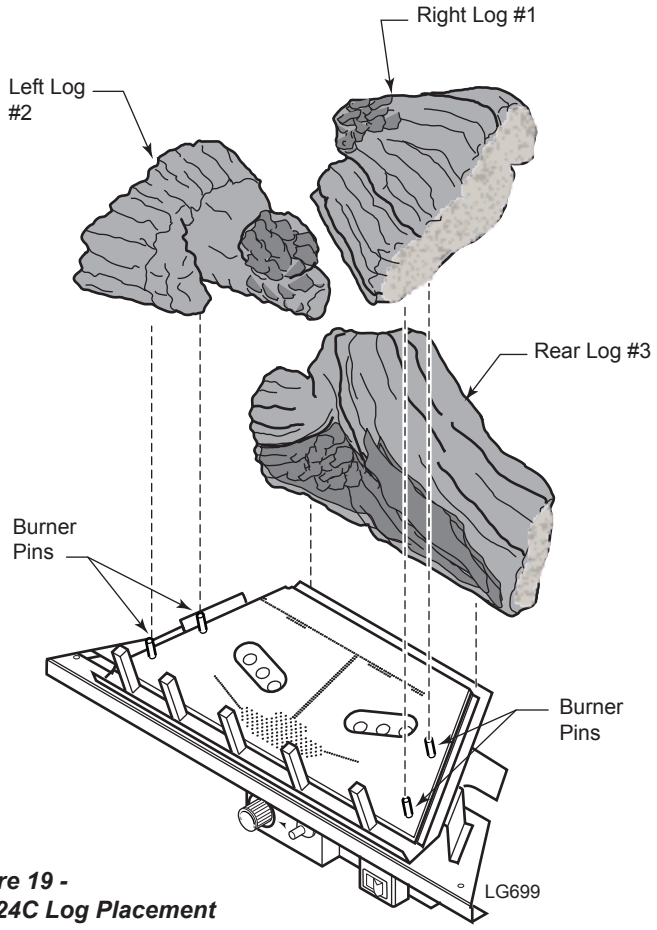


Figure 19 - DFX24C Log Placement

DFX32C LOG PLACEMENT

Figure 20

1. Install front right log (#1) on two pins on right side of burner.
2. Install left front log (#2) on two pins on left side of burner.
3. Install back log (#3) on back of burner.
4. Install right middle log (#4) on two pins on burner. Rest right end of right middle log on the right front log.
5. Install left middle log (#5) on two pins on burner. Rest left end of left middle log on left front log.

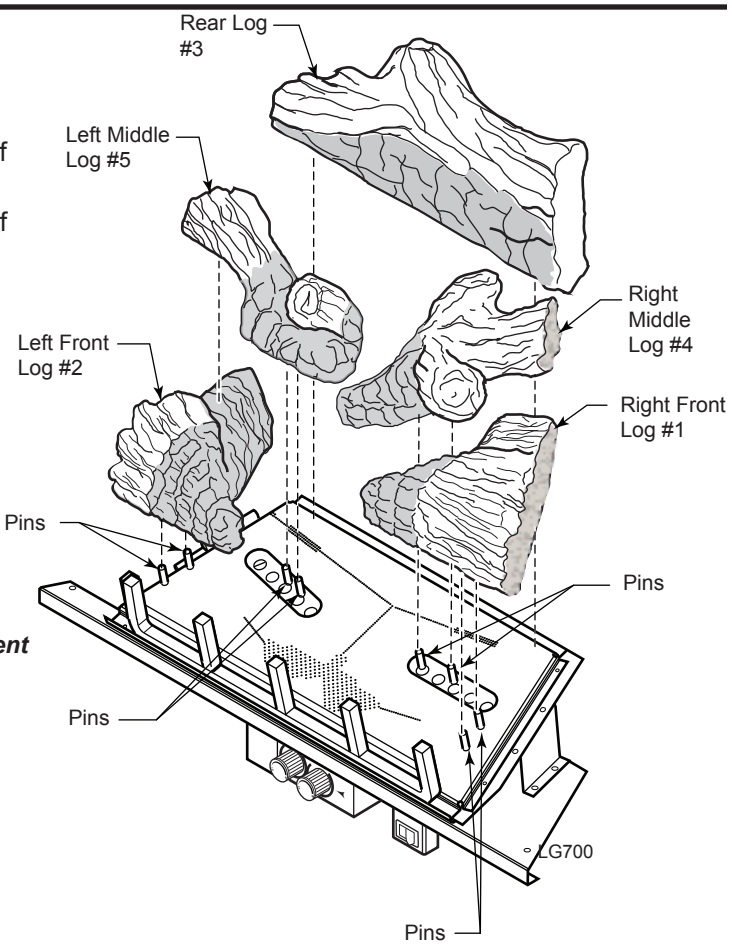


Figure 20 - DFX32C Log Placement

DBX24C LOG PLACEMENT

Install one-piece log on two burner pins. *Figure 21*

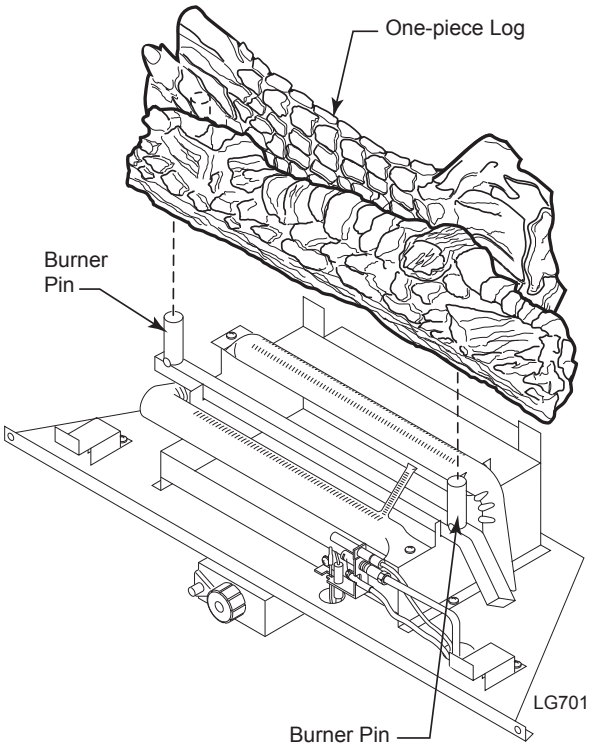


Figure 21 - 24BDXC Log Placement

PLACE ROCK WOOL

DFX24C and DFX32C MODELS

After installing logs, pull apart dime-size pieces of rock wool. Sprinkle rock wool evenly over burner ports. Wash hands after installing rock wool. Itching may occur.

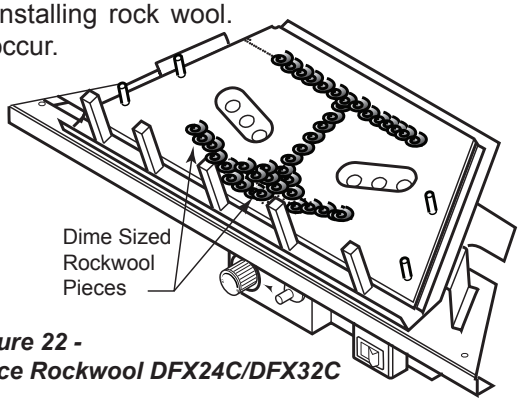


Figure 22 - Place Rockwool DFX24C/DFX32C

WARNING

- **Use only rock wool provided with log set.**
- **Do not add additional rock wool.**
- **Place rock wool on burner ports only.**
- **Keep air gap between rear log and burner clean.**

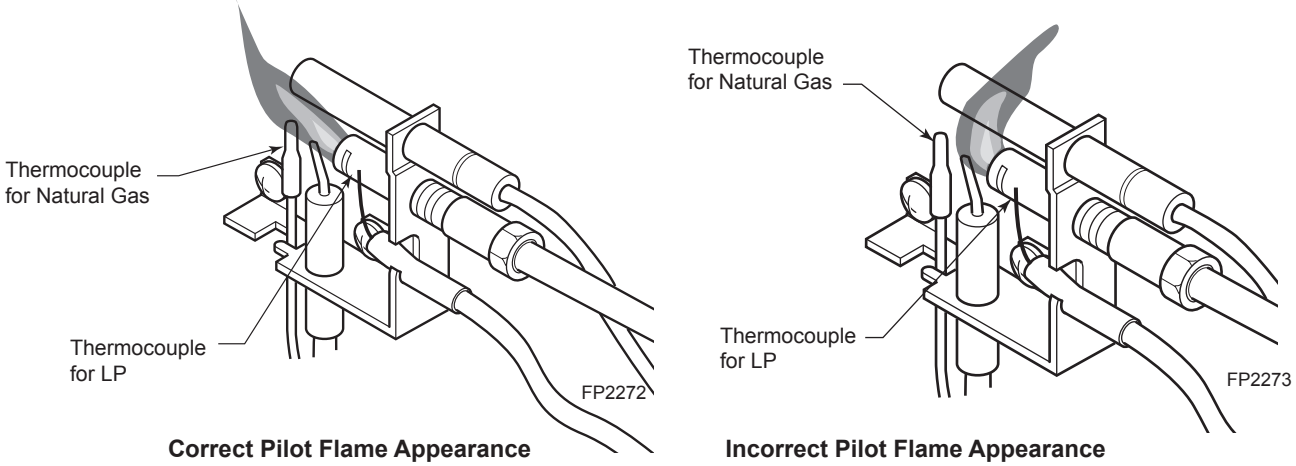
Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

CHECK THE PILOT FLAME

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural. *Refer to Figures 23 & 24* for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. *Refer to Figures 23 & 24* for incorrect shape of pilot flame.

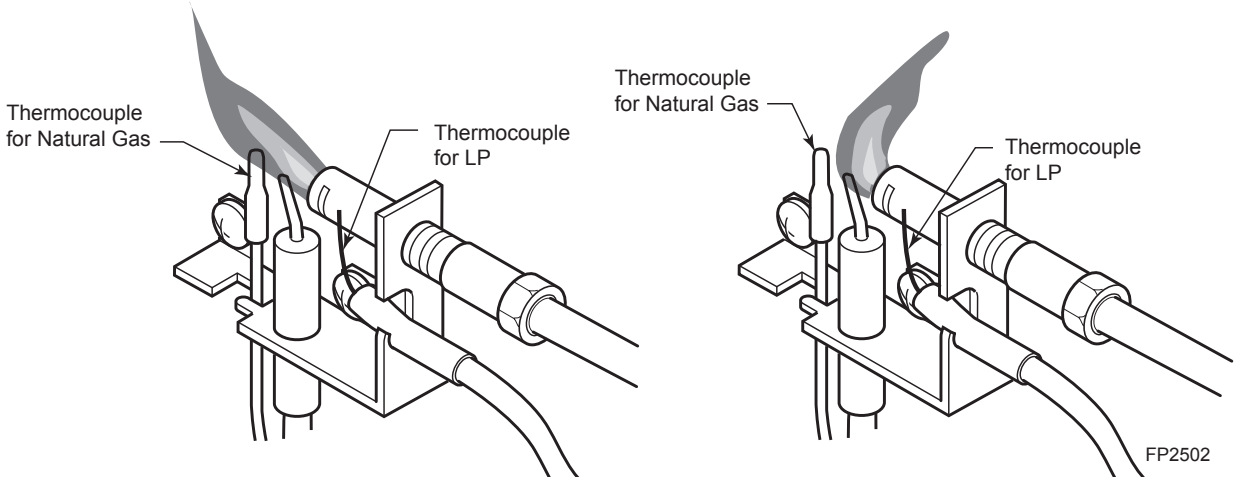
MILLIVOLT CONTROL



Correct Pilot Flame Appearance **Incorrect Pilot Flame Appearance**

Figure 23 -
Millivolt Control Pilot Flame Appearance

MANUAL & HI/LO CONTROL



Correct Pilot Flame Appearance **Incorrect Pilot Flame Appearance**

Figure 24 -
Manual & Hi/Lo Control Pilot Flame Appearance

CHECKING BURNER FLAME

DFX24C and DFX32C MODELS

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

Burner will have a random pattern of yellow flames. *Figures 25 and 26.* There should be glowing embers in front of burner.

DBX24C MODEL

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

The flames inside the one-piece log may be yellow. The flames should extend approximately 2" - 4" above the log. *Figure 27*

NOTE: The front flames and embers will be an opaque orange color during the burn off time.

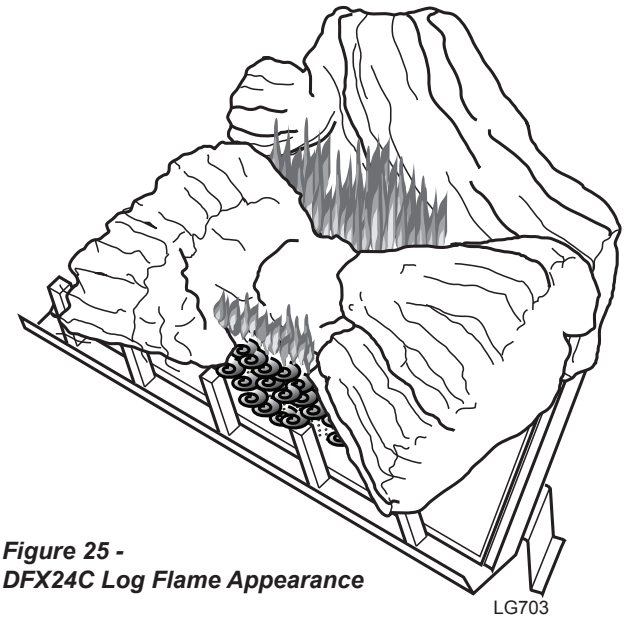


Figure 25 -
DFX24C Log Flame Appearance

LG703

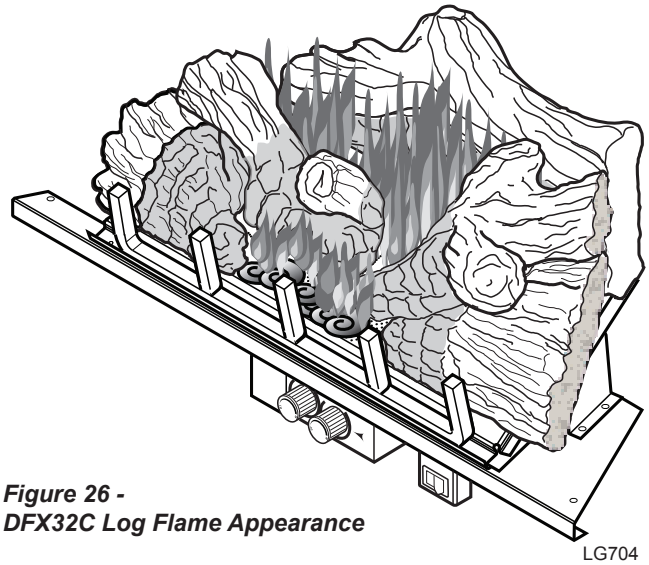


Figure 26 -
DFX32C Log Flame Appearance

LG704

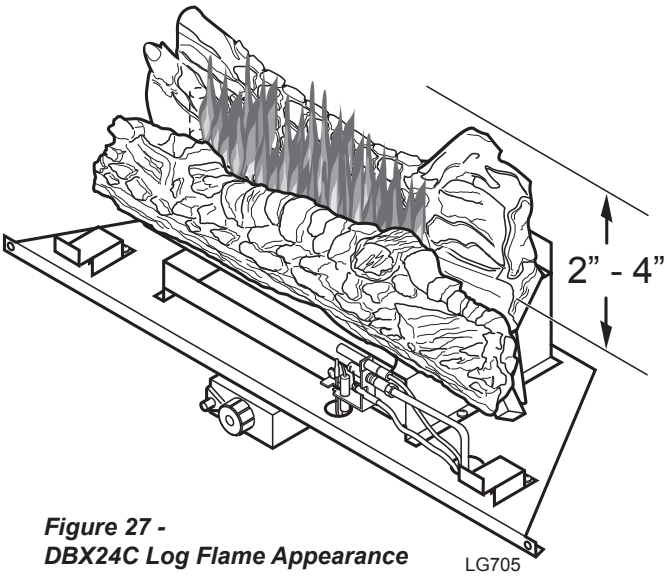


Figure 27 -
DBX24C Log Flame Appearance

LG705

OPERATING INSTRUCTIONS

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside the burn area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. *This is a normal and temporary occurrence.*

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING **If you do not follow these instruction exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

A. This appliance is equipped with a piezo ignition device which automatically lights the pilot. If piezo is not working properly, refer to *Match Lighting Instructions, Page 33.*

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not attempt to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in, or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

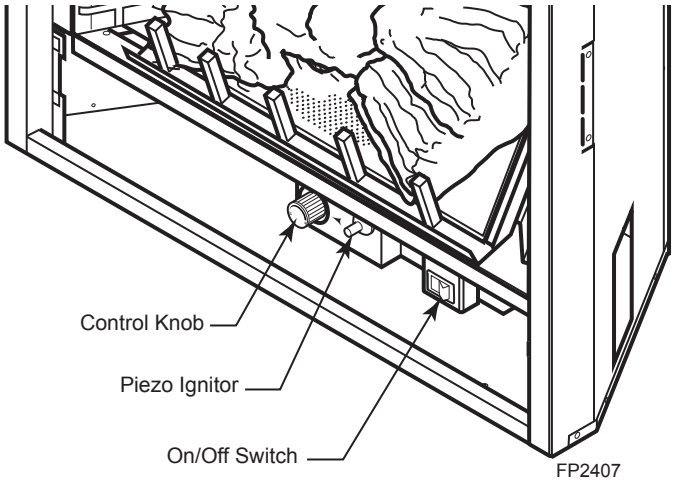


Figure 28 - DFXC/DBXC Controls

MANUAL CONTROL LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information.
2. Make sure the manual shutoff valve is fully open.
3. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
4. *Refer to Page 22, Figure 23* for the location of the piezo ignitor and control knob. Push in gas control knob slightly and turn control knob clockwise to the OFF position.
   NOTE: Knob cannot be turned to OFF unless knob is pushed in slightly. Do not force.
5. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas **STOP!** Follow the instructions under "What to Do if You Smell Gas", *Page 22*. If you do not smell gas, go to the next step.
6. From OFF position, push in gas control knob slightly and turn counterclockwise to the IGN position. *Figure 29.* Push in and hold control knob for 5 seconds.
   NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.
7. With the control knob pushed in, push and release the piezo ignitor button to light the ODS pilot. The pilot is located on the left side of the heater, behind the middle log and in front of the back log. If piezo ignitor does not light the pilot, refer to "Match Lighting Instructions", *Page 26.*
8. Hold the control knob in for an additional 10 seconds to prevent the ODS pilot from shutting off the gas while the thermocouple is warming up.
9. Release the control knob.
   • If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
   • If the ODS pilot will not stay lit after several tries, push and turn the gas control knob clockwise to OFF and wait 15 seconds. Repeat steps 6 through 9.
10. Push in control knob and turn counterclockwise to the HIGH setting. At this location the control knob will pop out when positioned correctly. The knob can now be positioned at any position between HIGH and LOW. *Figures 30 and 31*

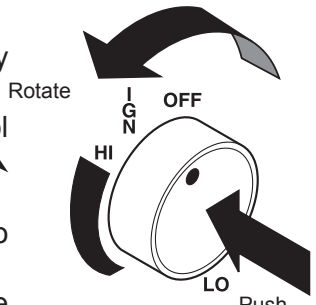


Figure 29 - IGN Position

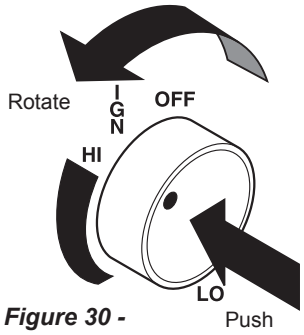


Figure 30 - HIGH Position

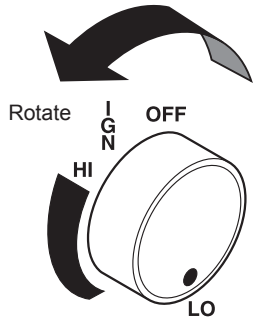


Figure 31 - LOW Position

WARNING

Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.

TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise to **OFF** position to completely shut off the heater.
2. If applicable: Turn off all electric power to the heater.

THERMOSTATIC CONTROL LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information .
2. Make sure the manual shutoff valve is fully open.
3. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
4. Refer to *Page 22, Figure 28* for the location of the piezo ignitor and control knob. Turn control knob clockwise ↷ to the OFF position.
5. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow safety instructions under *What To do if You Smell Gas, Page 23*. If you do not smell gas, go to the next step.
6. Turn the gas control knob counterclockwise ↶ to the IGN position. *Figure 32.* Push in and hold control knob for 5 seconds.
7. With the control knob pushed in and held, push and release the piezo ignitor button to light the ODS pilot. The pilot is located on the right side of the heater, behind the front log and in front of the burner. If piezo ignitor does not light the pilot, see *Match Lighting Instructions, Page 26*.
8. Hold the control knob in for an additional 10 seconds to prevent the ODS pilot from shutting off the gas while the thermocouple is warming up.
9. Release the control knob.
   - If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
   - If the ODS pilot will not stay lit after several tries, push and turn the control knob clockwise ↷ to OFF. Release and wait 15 seconds. Repeat steps 6 through 9.
10. Turn control knob to any position between LOW and HIGH. The knob position controls the thermostat temperature. *Figure 32*
11. The heater is now in proper operation. The following procedure should be used to achieve thermostatic control of the desired room temperature.

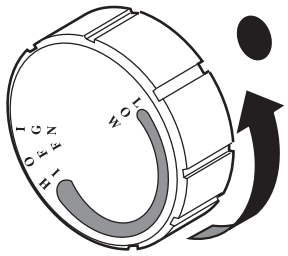


Figure 32 - Control Knob

a. Operate unit at higher setting until desired room temperature is achieved.
b. At the desired temperature, slowly turn the knob clockwise and stop rotating when flame disappears.
c. Thermostat is now set to maintain the current room temperature.
d. As the room temperature decreases, the thermostat valve will open to ignite the front and rear burner.
e. When the temperature reaches its set point (knob position), the thermostat valve will again shut off the burner.
f. This is the normal cycle of the heater.

TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise ↷ to OFF position to completely shut off the heater.
2. If applicable: Turn off all electric power to the heater.

MILLIVOLT CONTROL LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This gas log set is equipped with an ignition device (piezo) which automatically lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for *Match Lighting Instructions, Page 26*.
4. Turn gas control knob clockwise ↷ to the OFF position, set thermostat to lowest setting and turn ON/OFF switch to OFF position.
5. Wait (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow *What to Do if You Smell Gas, Page 22*. If you don't smell gas, go to next step.
6. From OFF position, turn the gas control knob counterclockwise ↶ to IGN position. Push in control knob for 5 seconds. ***NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.***
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise ↶ to the ON position.
10. After the pilot has been lit for one minute, the burners can be turned on. Turn the ON/OFF switch to ON position or adjust thermostat to desired setting.
11. If the gas logs will not operate, follow the instructions *To Turn Off Gas To Heater* below and call your service technician or gas supplier.

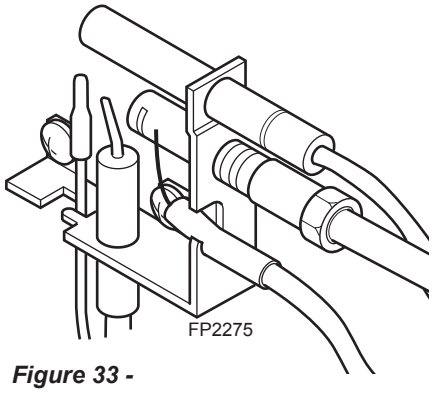


Figure 33 - Pilot

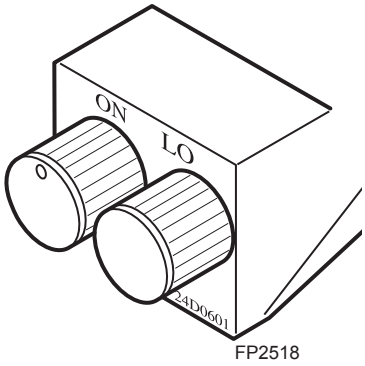


Figure 34 - Control Knobs

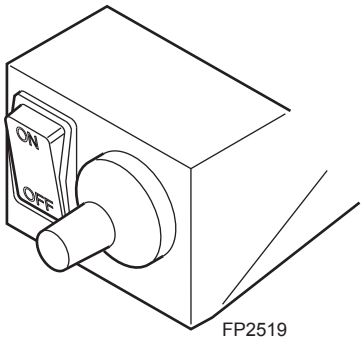


Figure 35 - Piezo

TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise ↷ to OFF position to completely shut off the heater.
2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting.
3. If applicable: Turn off all electric power to the heater.

MATCH LIGHTING INSTRUCTIONS

1. Remove any items necessary for easy access to the pilot (for example: logs, screens, etc.).
2. Follow appropriate lighting instructions found previously. Instead of pushing and releasing the piezo button, light a match and hold the flame to the end of the pilot and ignite the pilot.
3. After control knob has been released and pilot stays lit, reinstall any items that were removed for pilot access.
4. Call a qualified service technician for repair or replacement of the piezo ignitor.

CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

Remove fireplace screen. Carefully lower screen from mounting lugs and set aside during cleaning. See instruction manual for installation of screen. **DO NOT OPERATE THE UNIT WITH THE SCREEN REMOVED.**

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. See manual for correct log placement.

PERIODIC CLEANING - Refer to the parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Brush logs with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the front and rear burner, control and piezo covers and grate weldment.
- Inspect and clean burner. Remove lint or particles with vacuum, brush or pipe cleaners.
- External case should be dusted and wiped with a wet soapy cloth.

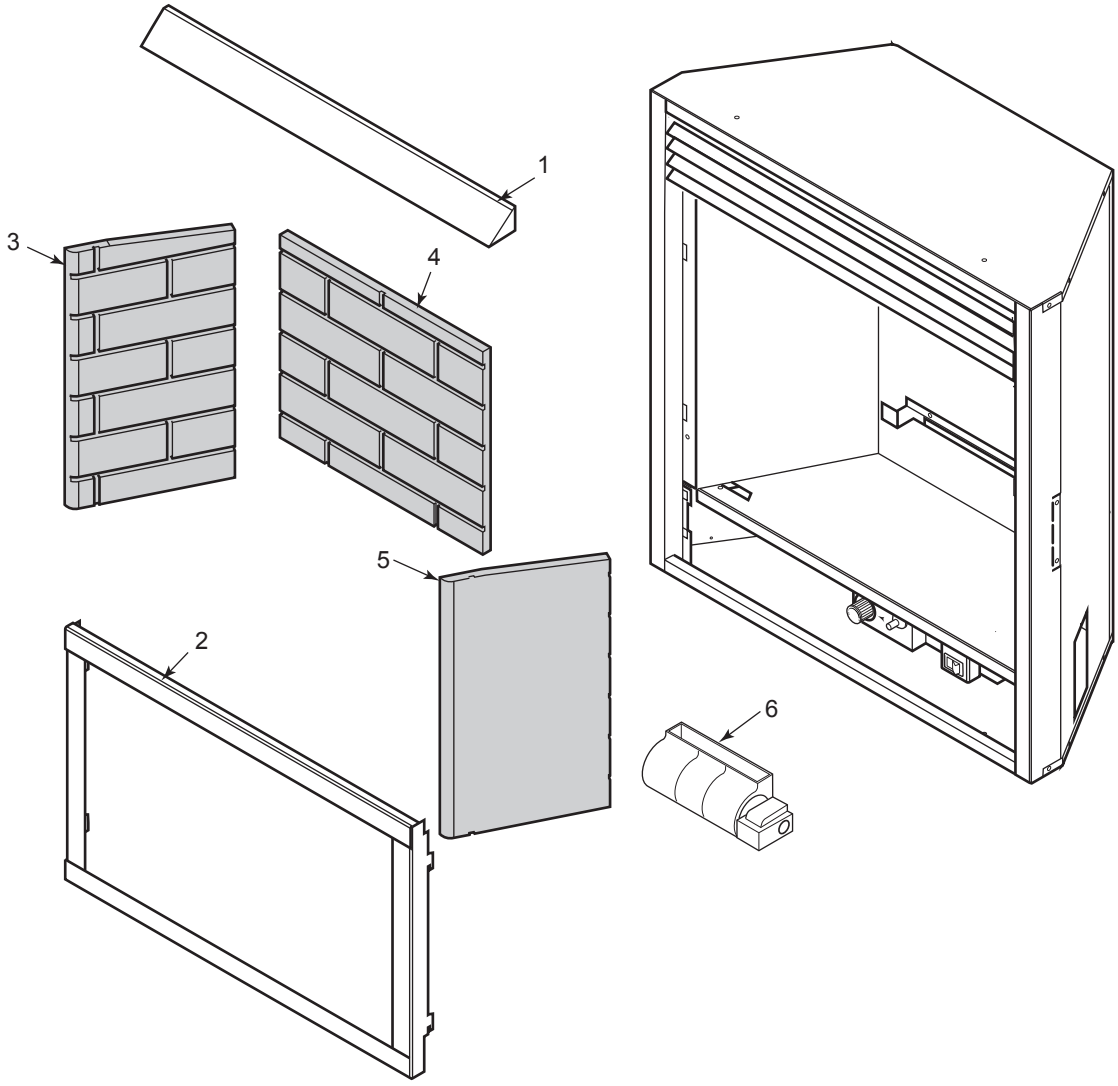
ANNUAL CLEANING/INSPECTION - Refer to the parts diagram for location of items discussed below.

- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of burner.

WARNING

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

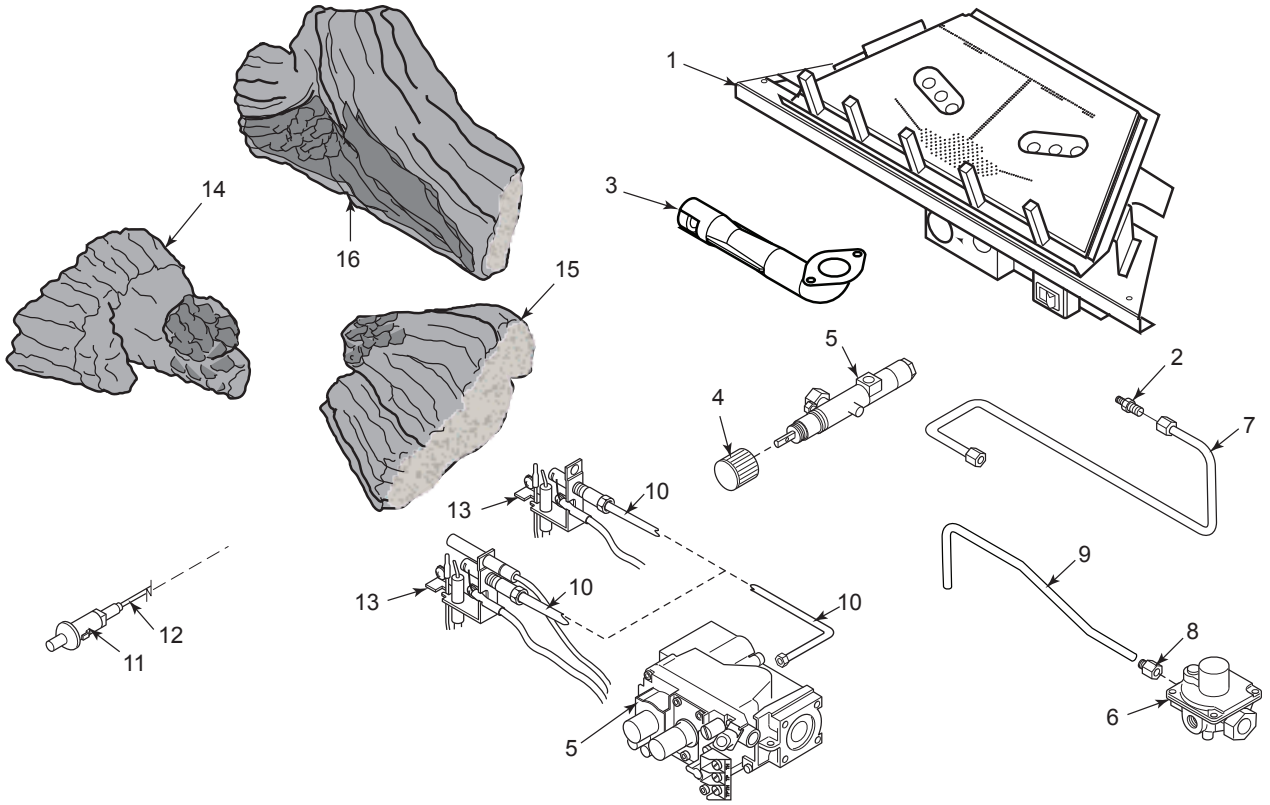
OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights, but flame goes out when control knob is released.	1. Control knob not fully pressed in. 2. Control knob not pressed in long enough. 3. Manual shutoff valve not fully open. 4. Thermocouple connection loose at control valve. 5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot. 6. Thermocouple damaged. 7. Control valve damaged.	1. Press in control knob fully. 2. After ODS/pilot lights, keep control knob pressed in for 30 seconds. 3. Fully open manual shutoff valve. 4. Hand tighten thermocouple connection until snug, then tighten 1/4 turn more. 5a.Contact local gas company. 5b.Clean pilot with vacuum cleaner. 6. Replace thermocouple. 7. Replace control valve.
Burner does not light after ODS/ pilot is lit.	1. Burner orifice is clogged. 2. Burner orifice diameter is too small. 3. Inlet gas pressure is too low.	1. Clean orifice. 2. Replace burner orifice. 3. Contact qualified service person.
Burner backfires during combustion.	1. Manifold pressure is too low. 2. Burner orifice is clogged.	1. Contact local gas company. 2. Clean burner or replace burner orifice.
Slight smoke or odor during initial operation.	1. Burner orifice is clogged or damaged. 2. Burner is damaged. 3. Gas regulator defective.	1. Clean burner or replace burner orifice. 2. Replace burner. 3. Replace gas regulator.
Logs appear to smoke after initial operation.	1. Vapors from paint or curing process of logs. 2. Vapors or smoke continue after heater has run with damper or window open for several hours.	1. Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours. 2. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	1. Turning control knob to HIGH position when burner is cold. 2. Air in gas line. 3. Dirty or partially clogged burner orifices.	1. Turn control knob to LOW position and let warm up for a minute. 2. Operate burner until air is removed from line. Have gas line checked by local gas company. 3. Clean burner or replace burner orifice.
No gas to pilot.	1. LP-regulator shut down due to inlet pressure too high.	1. Verify LP tank regulator is installed and set at 11" to 13" w.c. 2. Replace regulator on heater.



DFXC/DBXC Firebox Parts

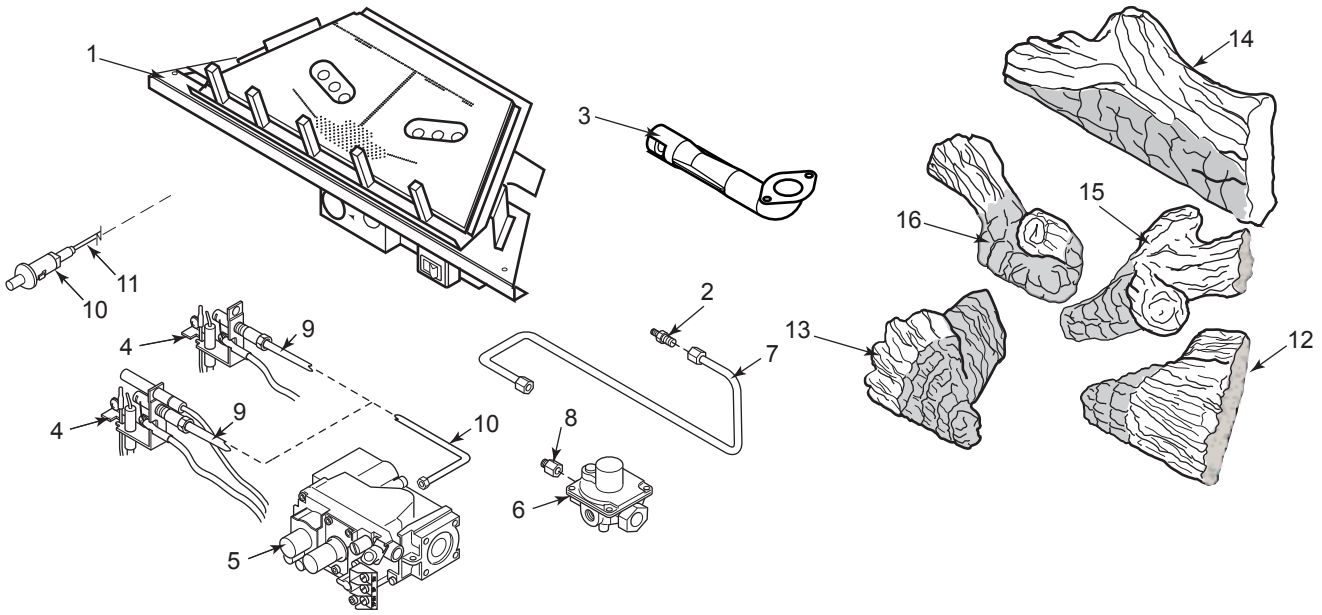
Ref.	Description	Qty.	DFX24C	DBX24C	DFX32C
1.	Canopy	1	33D4000	33D4000	33D5000
2.	Screen Assy.	1	33D4501	33D4501	33D5501
3.	Left Firebrick (Optional)	1	26D7061	26D7061	26D7065
4.	Center Firebirck (Optional)	1	26D7060	26D7060	26D7064
5.	Right Firebrick (Optional)	1	26D7062	26D7062	26D7066
6.	Blower (Optional)	1	BLO24T	BLO24TB	BLOT

WARNING **Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.**



DFX24C MILLIVOLT & MANUAL CONTROL BURNER PARTS

			DFX24C Millivolt		DFX24C Manual	
Ref.	**Description**	**Qty.**	**Natural**	**Propane**	**Natural**	**Propane**
1.	Burner/Grate Assy.	1	33D4043	33D4043	33D4043	33D4043
2.	Injector	1	59D0062	33D4046	59D0062	33D4046
3.	Venturi	1	58D0454	33D4058	58D0454	33D4058
4.	Control Knob	1	--	--	18D0603	18D0603
5.	Millivolt Valve	1	14D0467	14D0468	--	--
5.	Manual Control Valve	1	--	--	30D0201	30D0202
6.	Pressure Valve Regulator	1	14D0469	--	24D0305	24D0306
7.	Burner to Valve Tube	1	33D4511	33D4511	33D4513	33D4513
8.	Tube Fitting, 3/8 x 5/16	1	11V0313	11V0313	11V0313	11V0313
9.	Regulator Valve Tube, 5/16	1	--	--	33D4512	33D4512
10.	ODS Pilot Valve Tube, 3/16	1	49D0050	49D0050	49D0050	49D0050
11.	Piezo Ignitor	1	14D0503	14D0503	14D0503	14D0503
12.	Peizo Wire	1	00K0632	00K0632	00K0632	00K0632
13.	ODS Pilot Assy.	1	14D0473	14D0477	26D2529	14D0476
14.	Left Log #1	1	33D4040	33D4040	33D4040	33D4040
15.	Right Log #2	1	33D4041	33D4041	33D4041	33D4041
16.	Rear Log #3	1	33D4039	33D4039	33D4039	33D4039
17.	Tube Nut, 3/16 (not shown)	1	--	--	00F0077	00F0077
18.	Tube Ferrule, 3/16 (not shown)	1	--	--	00F0078	00F0078
19.	Tube Nut, 5/16 (not shown)	1	00K0917	00K0917	--	--
20.	Tube Nut, 5/16 (not shown)	3	--	--	00K0917	00K0917
21.	Tube Ferrule, 5/16 (not shown)	1	00K0918	00K0918	--	--
22.	Tube Ferrule, 5/16 (not shown)	3	--	--	00K0918	00K0918
23.	Flex Tube w/Fittings (not shown)	1	20H0022	20H0022	20H0022	20H0022
24.	8 Grams Rock Wool Bag (not shown)	1	58D0443	58D0443	58D0443	58D0443

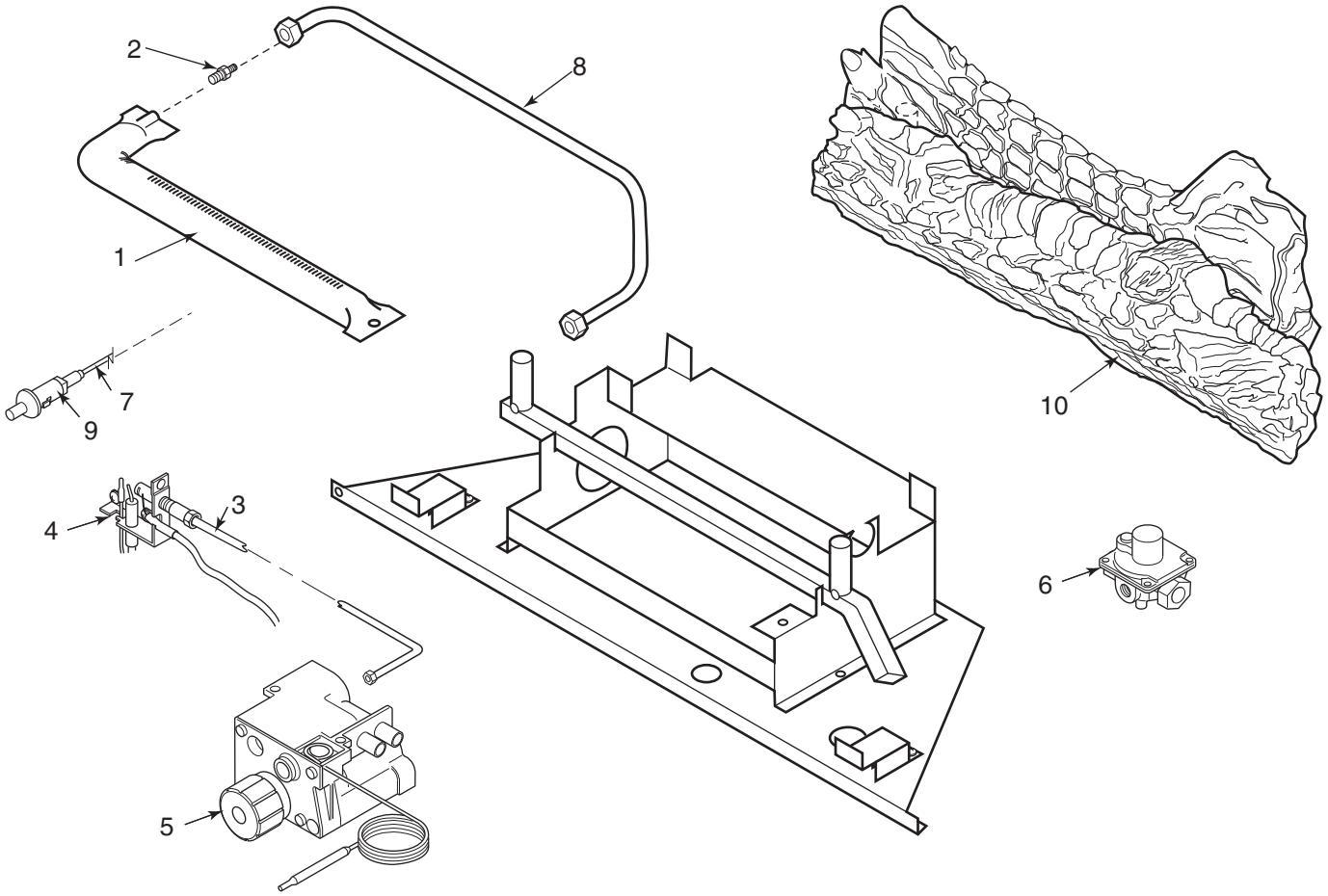


DFX32C MILLIVOLT BURNER PARTS

Ref.	Description	Qty.	DFX32C Millivolt Natural	DFX32C Millivolt Propane
1.	Burner/Grate Assy.	1	33D5050	33D5050
2.	Injector	1	33D5040	33D5039
3.	Venturi	1	58D0454	33D4058
4.	ODS Pilot Assy.	1	14D0473	14D0477
5.	Millivolt Valve	1	14D0467	14D0468
6.	Pressure Valve Regulator	1	14D0469	--
7.	Burner to Valve Tube	1	33D5511	33D5511
8.	Tube Fitting 3/8 x 5/16	1	11V0313	11V0313
9.	ODS Pilot Valve Tube, 3/16	1	49D0050	49D0050
10.	Peizo Ignitor	1	14D0503	14D0503
11.	Piezo Wire	1	00K0632	00K0632
12.	Right Front Log #1	1	33D5042	33D5042
13.	Left Front Log #2	1	33D5043	33D5043
14.	Rear Log #3	1	33D5044	33D5044
15.	Right Middle Log #4	1	33D5045	33D5045
16.	Left Middle Log #5	1	33D5046	33D5046
17.	Tube Nut, 5/16 (not shown)	1	00K0917	00K0917
18.	Tube Ferrule, 5/16 (not shown)	1	00K0918	00K0918
19.	Flex Tube w/Fittings (not shown)	1	20H0022	20H0022
20.	17 Grams Rock Wool Bag (not shown)	1	70D0039	70D0039

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.



DBX24C T-STAT BURNER PARTS

Ref.	Description	Qty.	DBX24C T-Stat Natural	DBX24C T-Stat Propane
1.	Burner	1	33D0070	33D0071
2.	Injector	1	18D0523	33D0281
3.	ODS Pilot Valve Tube, 3/16	1	49D0050	49D0050
4.	ODS Pilot Assy.	1	26D2529	14D0476
5.	T-Stat Control Valve	1	11V0701	11V0701
6.	Pressure Valve Regulator	1	24D0305	24D0306
7.	Peizo Wire	1	00K0632	00K0632
8.	Burner Valve Tube, 1/4	1	33D4053	33D4053
9.	Piezo Ignitor	1	18D0402	18D0402
10.	Front Log #1	1	33D0066	33D0066
11.	Tube Nut, 1/4 (not shown)	1	00F0079	00F0079
12.	Tube Ferrule, 1/4 (not shown)	1	00F0080	00F0080
13.	NPT Tube Fitting, 3/8 x 1/2 (not shown)	1	18D0310	18D0310
14.	Flex Tube w/Fittings (not shown)	1	20H0022	20H0022
15.	Modulating Screw (Min. Flow) (not shown)	1	972057	972057
16.	NPT Tube Fitting, 3/8 x 1/4 (not shown)	1	11V0312	11V0312

FORCED AIR KIT

If you are installing the forced air kit (Models BLO24-T, BLO24-TB or BLOT), see the installation instructions provided with the kit for electrical wiring requirements or the blower installation section.

Model DFX24C uses blower model BLO24T.
Model DFX32C uses blower model BLOT.
Model DBX24C uses blower model BLO24TB.

The firebox must be connected to main power supply at time of firebox installation. The blower must be installed prior to the installation of the unvented heater. The electrical connections must be made before the firebox is framed and enclosed in the finished walls.

BRASS LOUVERS

Optional brass louvers may be installed in place of the factory installed black louvers. See installation instructions provided with the brass louvers.

FIREBRICKS

Optional firebrick kits can be installed. See installation instructions provided with kit or *Page 33.*

CAUTION

Electrical connections should only be performed by a qualified, licensed electrician, main power must be off when connecting to main electrical power supply or performing service.

INSTALLING OPTIONAL FIREBRICK PANELS

1. Remove optional firebrick panels from packaging. Check that you have the following:
   - 3 firebrick panels
   - two (2) retainer brackets
   - two (2) black screws

   If any part or parts are missing, contact dealer where you bought fireplace.
2. Turn off fireplace and allow to cool.
3. Remove fireplace screen, *Page 17, Figure 17* and logs.
4. Place rear firebrick panel on back wall of firebox. Set bottom of panel behind the bracket tabs of the grate. *Figure 36*
5. Place one of the side firebrick panels in cabinet. Line up the hole in the retainer clip with the hole inside the firebox. Using Phillips screwdriver, attach the retainer bracket to inside of firebox. *Figure 37*
6. Repeat step five for the other firebrick side panel.

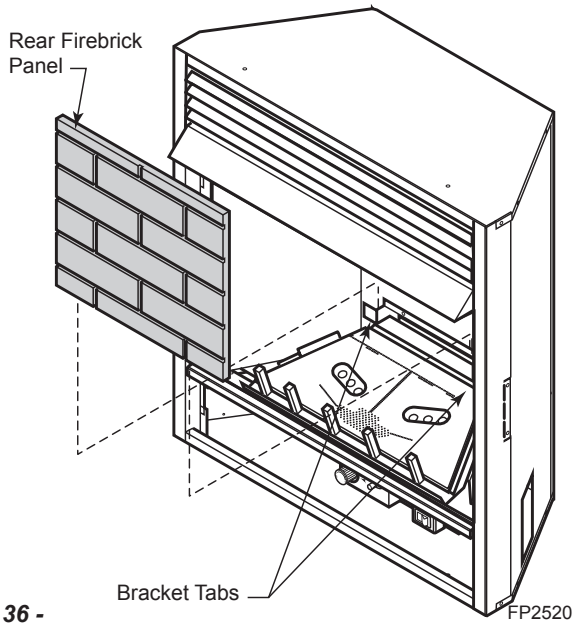


Figure 36 - Install Back Firebrick Panel

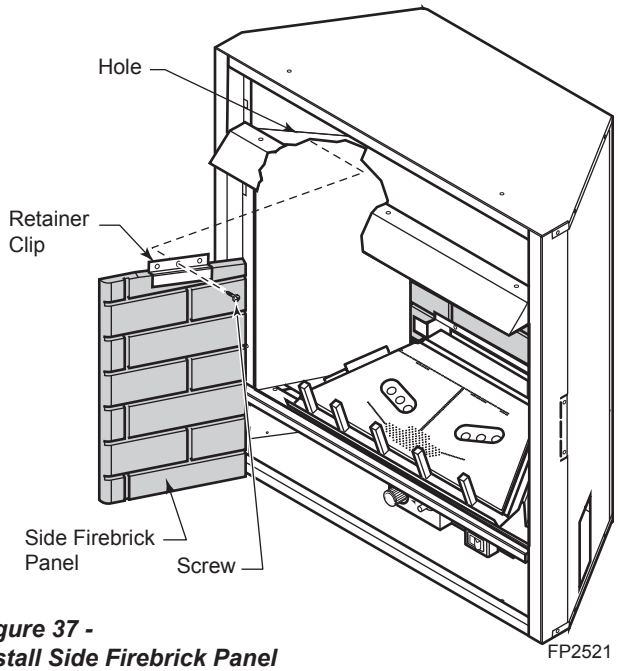


Figure 37 - Install Side Firebrick Panel

BLACK TRIM INSTALLATION

DFX24C/DBX24C

1. Remove black trim from protective packaging. Remove four (4) black screws and two (2) 90° angle trim brackets from owner's manual packaging.
2. Lay trim on floor and match corners of side trims to top trim. *Figure 38*

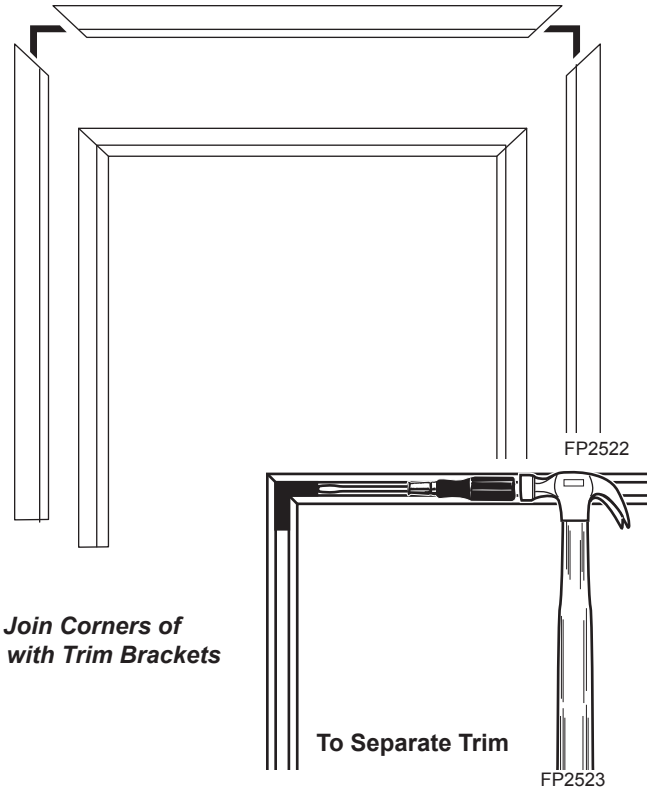


Figure 38 - Match and Join Corners of Black Trim with Trim Brackets

3. Use one 90° angle trim bracket to join the corner of one piece of side trim to the corner of the top trim piece. *Figure 38.* A rubber hammer or handle of a claw hammer will help secure the corners.
4. Repeat for other side.

   NOTE: If you do not attach the trim at the correct corners, use a hammer and screwdriver to tap on the one end of the 90° angle bracket. This will separate the two pieces of trim. *Figure 39*
5. Place assembled black trim on front of heater. Using four (4) black screws, secure black trim to sides of heater. *Figure 39*

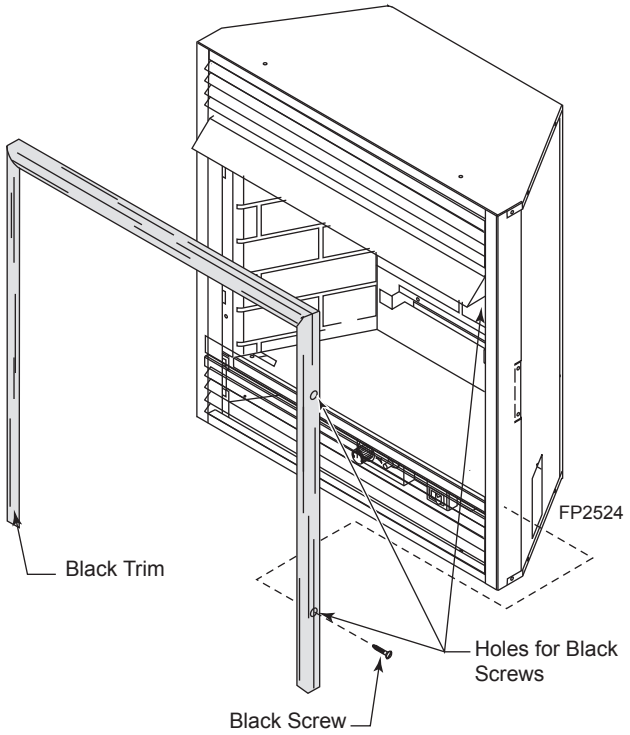


Figure 39 -
Attach Assembled Trim to Fireplace

BLACK TRIM INSTALLATION

DFX32C

1. Remove trim from protective packaging. Be careful not to scratch the trim. Remove two (2) 90° angled mounting brackets and two (2) 90° angled shims.
2. Lay trim face down on the floor. Line up the 45°-angled corners of the top trim with the 45°-angled corners of the side trims.

   NOTE: Both ends of the top piece of trim are mitered. *Figure 40*
3. Slide one (1) 90° angled bracket (with attached screws) and one (1) 90° angled shim in the outside corner slot where the top and side trims meet. *Figure 41*

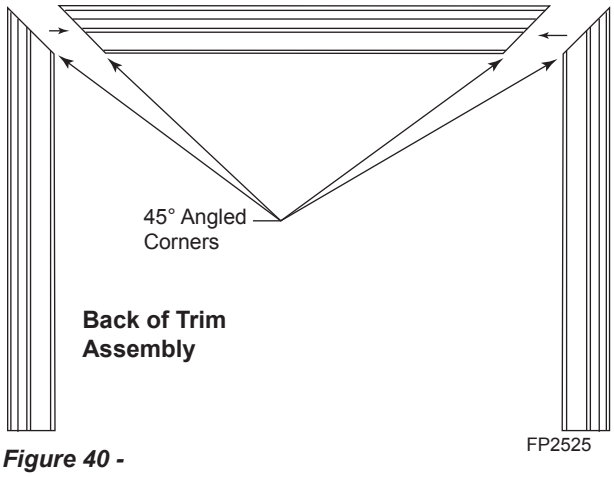


Figure 40 -
Align Corners of Trim Pieces

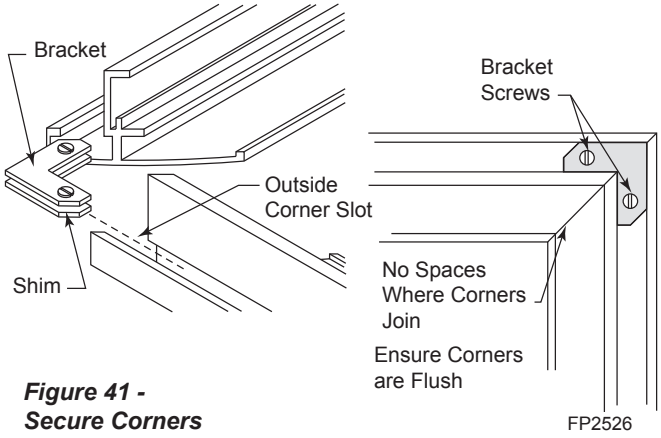


Figure 41 -
Secure Corners

4. Hold the corners together securely. Tighten screws on bracket with flat head screwdriver. Make sure the corners are flush and there are no spaces. ***Do not over tighten screws.*** *Figure 41*
5. Repeat for other side trim.
6. Slide assembled trim over the top and down the sides of the fireplace. Flush trim with front of fireplace as shown in *Figure 42.*
7. Align holes in assembled trim with holes in side of fireplace. Using a Phillips screwdriver, attach trim with four (4) screws provided — two for each side of fireplace. Tighten snuggly. *Figure 43*

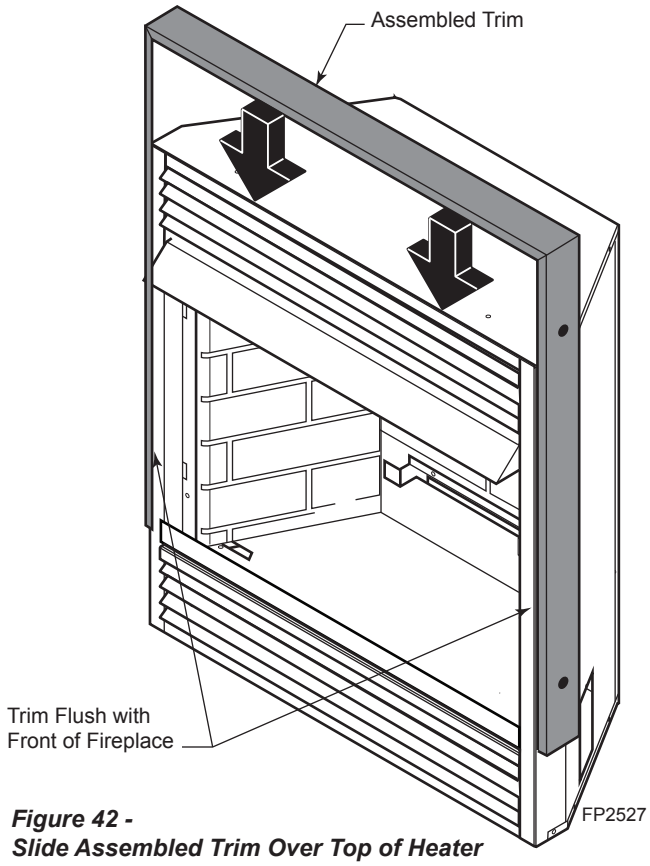


Figure 42 -
Slide Assembled Trim Over Top of Heater

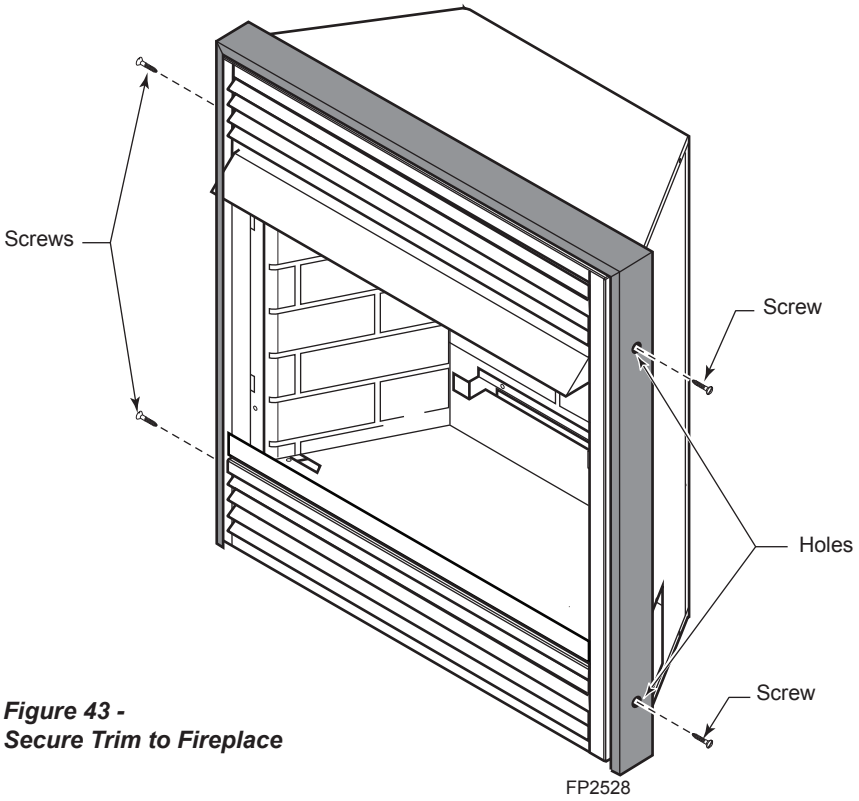


Figure 43 -
Secure Trim to Fireplace

LIMITED LIFETIME WARRANTY POLICY

LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate and Stainless Steel Burners.

FIVE YEAR WARRANTY

The following components are warranted for 5 years to the original owner, subject of proof of purchase: Ceramic Fiber Logs, Catalytic Filter and Aluminized Burners.

BASIC WARRANTY

MHSC warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of one year from date of installation. After installation, if any of the components manufactured by MHSC in the appliance are found to be defective in materials or workmanship, MHSC will, at its option, replace or repair the defective components at no charge to the original owner. MHSC will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of one year from the date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alteration, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. MHSC does not assume for it any other obligations or liability in connection with the sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damages, those limitations of exclusions may not apply to you. You may also have additional rights not covered in this Limited Warranty.

MHSC reserves the right to investigate any and all claims against the Limited Warranty and decide upon method of settlement.

IF WARRANTY SERVICE IS NEEDED...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/ serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

MHSC
149 Cleveland Drive • Paris, Kentucky 40361
www.mhsc.com